



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/951,734	10/16/97	KOVRT	0270-2272

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SIXBEY FRIEDDMAN LEEDOM & FERGUSON
2010 CORPORATE RIDGE SUITE 600
MCLEAN VA 22102

EXAMINER
VO, T

ART UNIT	PAPER NUMBER
3402	

DATE MAILED: 02/04/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/951,754

Applicant(s)

KDHRT

Examiner

HIEU T. VO

Group Art Unit

3402

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10/16/1997
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-20 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

1. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Thimmesh (U.S. Pat. 5,595,164).

Thimmesh shows in Figures 1-3 a heating device 10 coupled to a cylinder head 12. Cylinder head 12 is adapted to include an intake opening 54 and mounting surface 56 (col. 3 lines 55-56). The heating device 10 includes a frame 16 having a flange 18 and recessed body portion 19 having side walls 20 which extending perpendicular below the mounting flange 18 (col. 2 lines 62-67 to col. 3 lines 1). A heating element 26 is secured within C-shaped mounting element 25 (col 3 lines 4-12). First end 28 of heating element 26 is connected to the positive terminal of the power source 29 and second end 30 operates as the grounding connection for heating element 26 thus a circuit is formed to conduct electricity through the heater element 26 (col. 3 lines 22-29). In operation, airflow enters the cylinder head 12 through inlet means 102,

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which is formed in the cover 14, and the heating element 26 is heated by the electric current and, in turn, heats the air entering the intake opening 54 of the cylinder head 12 (col. 4 lines 39-51).

Response to Arguments

2. Applicant's arguments in Amendment filed on 02/18/1997 with respect to claims 1- 20 have been considered but are deemed to be moot in view of the new ground(s) of rejection.

Applicant's argument at page 5-6 of the amendment regarding an intake air heater which is capable of being mounted in an intake air manifold formed integrally in the cylinder head is noted; however, Thimmesh clearly teaches a heating device is coupled to the cylinder head which is adapted to includes an air intake opening and a mounting surface (col. 2 lines 60-65, col. 3 lines 53-67, and Figure 1).

Applicant's argument at page 7 of the amendment regarding a cylinder head having a connector aperture formed in a side surface for receiving an electrical connector for connection to a heating element is noted; however, Thimmesh clearly shows in Figure 1 the cylinder head is provides with the thread bore located in the side surface and align with the aperture of the heating device for providing a positive terminal for heating element (col. 4 lines 1-29).

Applicant's argument at page 7-8 of the amendment regarding the intake air heater including the flange portion compressively positioned between the air delivery conduit and the cylinder head, and the flange portion is designed with a predetermined minimal thickness for minimizing the distance between the air delivery conduit and the cylinder head are noted;

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however, Thimmesh clearly shows in Figure 1 the heating device having the flange portion disposed in between the cover ,which an air inlet means is formed, and the cylinder head. The improved heating device allows the heating element to be recessed into the cylinder head thus permitting the cylinder intake airflow to be heated without significantly increasing the distance between the engine parts located above and below the heater (col. 2 lines 14-19).

3. This is a Continuation of Applicant's earlier Application No. 08/552,987 filed on 11/3/1995. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MEP... § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than **SIX MONTHS** from the date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Hieu T. Vo whose telephone number is (703) 305-6800. The examiner can normally be reached on Monday through Friday from 7:30 AM - 4:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen, can be reached on (703) 308-1946. The fax phone number for this group is (703) 308-7764.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



HIEU T. VO
Patent Examiner
Art Unit 3402

HTV
January 27, 1998



Tony M. Argenbright
Primary Examiner
Art Unit 3402